

REMARKS

The present system is a broadcast system for delivering content to a terminal, a method of delivering content to terminals, a broadcast system, a method of using a plurality of terminals for delivering content to terminals in respective locations, a terminal for receiving content from a broadcast network having a plurality of transmitters for delivering content to terminals in respective locations and a method of receiving content from a broadcast network having a plurality of terminals. In accordance with an embodiment of the invention, a broadcast system 1 for delivering content to a terminal 3 includes a plurality of transmitters having transmission characteristics to define a network topology as illustrated in Figs. 5 and 6. A network controller 33 in response to distribution of demand for specific content determines an appropriate network topology by varying the transmission characteristics of at least one of the transmitters. The variation of the network topology provides a solution to the prior art problems as described above in conjunction with Fig. 1 which provides improvement of spectral efficiency of a network. See the first paragraph in the Summary of the Invention. In accordance with a preferred methodology, the appropriate network topology is varied by changing cell size as, for example, described in page 2, lines 21-32, through page 3, lines 1-11, of the specification.

Claims 1-41 stand rejected under 35 U.S.C. §102 stand anticipated by United States Patent 6,130,898 (Kostreski et al). These grounds of rejection are traversed for the following reasons.

In the first place, Applicants do not disagree with the Examiner's description of Kostreski et al as teaching overlapping of simulcast broadcasts in a desired service area. What is disclosed in Fig. 5A is that the central transmitter TX1 and the distributed transmitters TX2-TX4 produce a simulcast utilizing an omnidirectional antenna pattern as described in column 11, lines 17-34, or a simulcast as illustrated in Fig. 5B with a central omnidirectional pattern from TX1 and directional patterns from transmitters TX2-TX4 as described in column 11, lines 34-46. However, nowhere is there any description of variation of the broadcast pattern of signals from the transmitters which is responsive to a demand for specific content as recited in claim 1, an analysis of the content to be delivered together with its destination as recited in claim 9, means for determining a distribution of terminals for delivery of common content and varying the operational characteristics of the transmitter responsive to the determined distribution of terminals as recited in claim 14, determining a distribution of terminals receiving common content and varying a set of operational characteristics of a transmitter responsive to the distribution of terminals as recited in claim 15, a transmitter operating in accordance with a variable set of operational characteristics with the operational characteristics defining a network topology as recited in claim 16, and each transmitter operating in accordance with a variable set of operational characteristics and changing reception characteristics in accordance with a signal indicative of operational characteristics of a transmitter with the operational characteristics of the transmitter defining a network topology as recited in claim 17. Kostreski et al's solution to the problems associated with

simulcasting over a large area is typified by a larger service area MA as illustrated in Fig. 5A and 5B in which individual transmitters have either overlapping omnidirectional patterns or a combination of a central omnidirectional pattern and directional patterns as illustrated in Fig. 5B. However, Kostreski's fixed network topology does not meet the aforementioned limitations of the claims.

For example, with respect to claim 1 in Section 4, the Examiner cites column 8, lines 12-48, column 10, lines 9-36 and column 11, lines 1-45, as having a network controller which the Examiner identifies as element 5 which is the interactive headend to determine the appropriate topology for varying transmission characteristics of at least one of the transmitters. However, it is submitted that none of the referenced portions suggest a varying of the transmission characteristics of at least one of the transmitters. What is described in column 8, lines 12-48, is that user provides inputs from a remote control device 85 to generate selections of available broadcast programs. However, the Examiner cannot demonstrate how such customer selection meets the limitation of claim 1 of varying the transmission characteristics of at least one of the transmitters and further, that the transmission characteristics define a network topology and finally, a network controller is responsive to distribution of demand for a specific content to determine an appropriate network topology. Column 10, lines 9-36, further describe how the user interacts with the interactive headend 5 but, again this does not describe how the aforementioned claim language is met. Finally, column 11, lines 1-45, describe the overlapping of signal coverage between the central transmitter TX1 and the

remaining transmitters TX2-TX4 for simulcast transmission. The overlapping patterns, as described above with respect to Figs. 5A and 5B, are not varied and simply amount to how distinct embodiments of overlapping signal patterns from the transmitters TX1-TX4 cover a large area of signal coverage MA by overlapping signal patterns from the individual transmitters TX1-TX4. This subject matter would not be considered by a person of ordinary skill in the art to meet the subject matter of the claims.

It is requested that if the Examiner persists in the rejection of any of the claims that he, for example, describe in detail how the static configuration of transmitter signal patterns as taught in Figs. 5A and 5B can be construed to meet the subject matter of the claims, such as claim 1 wherein, as stated above, a network controller is responsive to distribution of demand for a specific content to determine an appropriate network topology by varying the transmission characteristics of at least one of the transmitters wherein the transmission characteristics define a network topology.

Independent claim 9 is patentable for the same reasons set forth above with respect to claim 1.

Independent claims 14 and 15 define a broadcast system and a method involving a plurality of transmitters for delivering content to terminals in respective locations which requires the variation of operational characteristics of the transmitter which is responsive to a determined distribution of terminals. The static configuration of transmitters, as illustrated in Figs. 5A and 5B of Kostreski et al,

would not be considered by a person of ordinary skill in the art to meet this limitation. If the Examiner persists in the stated grounds of rejection, it is requested that he point out on the record how variation of the operational characteristics of the transmitter in response to a determined distribution of terminals is taught in Kostreski et al.

Claims 16 and 17 respectfully recite a terminal and a method of receiving content from a broadcast network in which each transmitter operates in accordance with a variable set of operational characteristics. It is submitted that Kostreski et al do not disclose a terminal comprising means operable to receive a signal indicative of the operational characteristics of a transmitter which are variable whereby the means operable to receive is operable to receive content delivered in accordance with the signal and the operational characteristics of the transmitter define a network topology as recited in claim 16 and further, with respect to claim 17, a method comprising receiving a signal indicative of operational characteristics of a transmitter delivering said content and changing reception characteristics in accordance therewith with the operational characteristics of the transmitter defining network topology. If the Examiner persists in the stated grounds of rejection, it is requested that he point out on the record where the variable set of operational characteristics of the transmitter is found in combination with the terminal comprising means operable to receive a signal indicative of the operational characteristics of the transmitter is found as recited in claim 16 and further receiving a signal indicative of operational characteristics of a transmitter delivering said content and changing the reception

characteristics in accordance therewith with the operational characteristics of the transmitter defining a network topology as recited in claim 17.

Furthermore, the dependent claims define further aspects of the present invention which are neither anticipated nor rendered obvious by Kostreski et al.

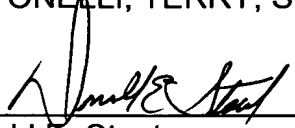
In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance.

Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 0171.40294X00).

Respectfully submitted,

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